

RUWI reserves the right to make changes in accordance with technical progress.



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### Sub-surface milling machines





## The **RUWI** product family

Flexible, effective and versatile – the **RUWI** family! This range of products makes timeconsuming refitting of sub-surface milling and routing machines a thing of the past. Set up the tools you need regularly in advance so that they are ready at hand within seconds when you need them – save time and money.

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RUW

**RUWI drives** can be infinitely and precisely adjusted to the preset position to meet specific application requirements. This eliminates costs and the need for time-consuming precision settings. Operating height can be adjusted with stop bolts (**RUWI M + L**) or freely positioned (all models) as required.

**RUWI** single-spindle sub-surface milling machine is the economic tool for stationary and mobile use in workshops or on customer premises. Astonishingly swift fitting and replacement of milling and grinding tools.

**RUWI** three-spindle sub-surface milling machine with three drive motors in standard model. The trebletooled RUWI is frequently set up beside the CNC machine. Waiting times can be used to carry out work such as bevelling, rounding or deburring.

**RUWI** five- to ten-spindled sub-surface milling machine. The leading model of the **RUWI family** places a wide range of milling and grinder tools at your fingertips.

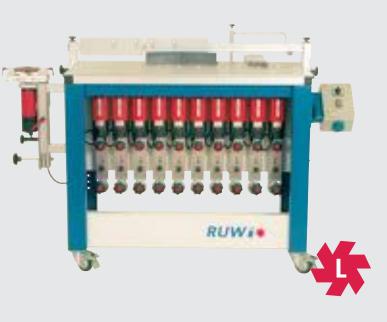




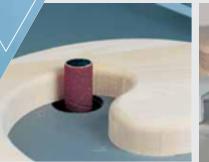
The heart of every *RUWI* is its reliable, powerful, robust drive. The electric motors are premium quality products, designed for enduring top-precision performance, also suited for use in industrial shift cycles.

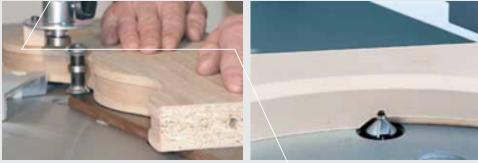
#### The most important technical data:

- infinitely variable speed adjustment range of 8,000 – 25,000 rpm
- control electronics prevent speed fluctuation under load
- overload protection and PTC thermistor
- robust, powerful 1050-watt motor for
- continuous industrial operation
- made in Germany
- soft startup and inrush current limiter
- 230 V voltage
- milling spindle with 22 mm diameter and reverse-acting refeed thread prevents dirt from entering the unit, precision double bearings for highly accurate milling results
- keyless steel chuck
- 8 mm collet chucks (standard), optional 6 mm or 6.35 mm



# Universal application





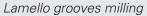
Sanding edges

Flush milling

Where certain kinds of milling work are frequently repeated, the milling tools can be changed in the wink of an eye – this saves time and money. **RUWI sub-surface milling machines** are available to suit every size of company – from a one-person joiner's workshop to a major industrial operation. They are the ideal solution for processing small-series and individual parts made of the widest variety of materials. They can be permanently installed beside a large-scale CNC machine, moved for use at different locations in the workshop or even transported to a construction site.

- milling operations with next to no fitting time for the widest variety of tools
- bevelling, rounding, profiling, groove-milling, grinding
- solid wood, board materials, plastics, HPL and aluminum milling
- precision milling without trial milling operation
- modify roundings, bevellings or profiles within seconds





Rounding on ring

Copy milling on ring



Bevelling on ring



Upper tool cover removed to allow photography





Deburring with plastic insert

### Accessories





3-D unit for retrofitting

Stop ruler

RUWI sub-surface milling machines can be expanded to meet growing operational needs. The units can be upgraded and retrofitted without effort. The small, mobile RUWI S can be upgraded with a 3D unit, as can its bigger siblings **RUWI M** and **RUWI L**.

This **3-D free-milling jig** allows effortless milling of bent or highly curved workpieces. Two movable workpiece holders make it possible to trace every curve. An adjustable protective tool cover and adjustable extraction connectors ensure maximum safety.

The **stop ruler** with adjustable stops, pressure jig and extraction tunnel is available with or without fine-tuning regulation, depending on the base model.

The freely adjustable *curved ruler* allows infinite retracing of inner and outer radii.



Increased bench height

Pressure jig

V.L.P

Precision adjustment





Curved ruler

RUWIL can be retrofitted with additional drive units. This allows you to fit the largest **RUWI** with up to ten motors and, consequently, accelerate your working processes. Fitting a new drive is fast and straightforward.

The small **RUWI S** is first choice when it comes to finishing CNC workpieces quickly and effortlessly. It is an interesting and economical auxiliary tool for every wood and plastic processing company. Fitted with the high quality electrical **RUWI** motors it can be used without problem even in continuous industrial operations.

Adjusting curved ruler

# The RUWI-Drive reliable - powerful - robust

#### Infinitely variable revolution

**from 8000 - 25000 rpm** 



#### Motor with control electronics

- \* Users do not recognise any speed fluctuations under load due to the tachometer generator on the motor shaft. The optimum speed is always maintained at any load
- In case of motor overload of twice the nominal current (tool blocking) the electronics shut down the drive

#### **Technical data**

- Voltage
- Nominal current
- Power consumption
- Revolutions
- Gradual start
- Overload protection
- Constant revolution under loadt
- PTC-thermo-monitoring

#### Robust and heavy-duty motor

- With 1050 Watt
  - Made in Germany

#### Motor with overload protection

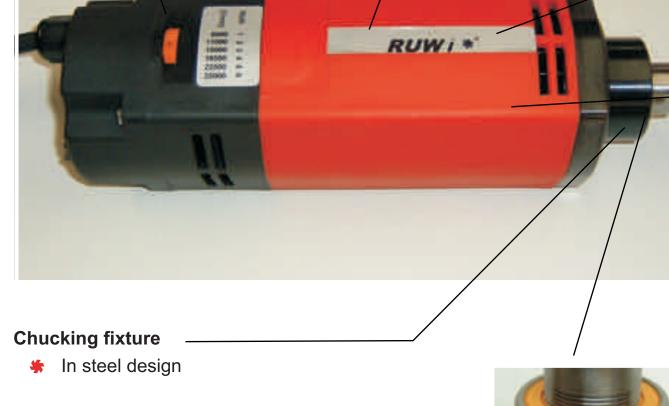
PTC resistor

### Gradual start and start current

- components
- accidents

#### 22 mm diameter milling spindle

penetration



#### Precise double bearing of the milling spindle

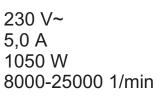
- **For highly accurate milling images**
- For high precision revolution
- Spindle running on two ball bearings for \* extreme loads and long periods of time







Collets



6 mm 6,35 (1/4') 8 mm (standard)

for continuous industrial application

Not to be compared with conventional manual milling machines in terms of performance and design

Temperature monitoring with

The gradual speed increase protects mechanical and electrical motor

Starting without jolts reduces the risk of

The counter-rotating refeed thread above the ball bearings reduces dust and dirt

#### See reverse for type overview

### Typ list



	Article	Art. No.		Article	Art. No.
RUWO	Sub-surface milling machine <b>S</b> Basis 1 (1 drive) table size 520x430 with pinchrolls	10000	RUWI*	Sub-surface milling machine L Basis 6 (6 drives) expandable to 10 drives table size 1070x500, with caster	10006
	Sub-surface milling machine <b>S</b> Basis 1 Plus (1 drive + 3D unit) table size 520x430	10001		Sub-surface milling machine L Basis 7 (7 drives) expandable to 10 drives table size 1070x500, with caster	10007
	Sub-surface milling	10002		Sub-surface milling machine L Basis 8 (8 drives) expandable to 10 drives table size 1070x500, with caster	10008
RUWI	machine <b>M</b> Basis 3 (3 drives) table size 640x500, with caster		RUWi *	Sub-surface milling machine L Basis 9 (9 drives) expandable to 10 drives table size 1070x500, with caster	10009
	Sub-surface milling machine <b>M</b> Basis 3 Plus (3 drives + 3D unit) table size 640x500, with caster	10003		Sub-surface milling machine L Basis 10 (10 drives) table size 1070x500, with caster	10010
RUWs *	Sub-surface milling machine L Basis 5 (5 drives) expandable to 10 drives table size 1070x500, with caster	10005		Sub-surface milling machine L Basis 10 Plus (10 drives +3D unit) table size 1070x500, with caster	10011

### Typ list accessories

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	Article	Art. No.	Article Art. No.			
j <u>e</u> t	Stop ruler for RUWI L Base 5 - 10 incl. fine-tuning regulation for RUWI M Base 3 incl. fine-tuning regulation	10100 10150	Increased bench height two-part set for flush milling of edges1050010550 for Base 310510 for Base 1			
	for RUWI S Base 1 no fine-tuning regulation	10110	Attacking bracket laterally 10830			
	Curved ruler	10200	to the cultivation of the table extension laterally on the left of or right			
	Contermax A precise and rapid means for providing a profile across the end of a timber section.	10250	Mounting rail infront     to the cultivation of the table     extension infront     length 830 mm for Base 5 - 10     length 530 mm for Base 3			
	Digital depth gauge	10270	length 430 mm for Base 1 10800			
	3D unit for installing on the underfoor milling machine	10300	Table extension 10840   to the enlargement of the machine table size 1100 x 172 mm   Combination options Combination options			
	Drive unit as retrofitting kit Extra charge for fine-tuning regulation	10400 10450	Attacking bracket laterally Attacking bracket laterally Mounting rail infront Table extension			
*	Digital altimeter only available with drive unit Digital altimeter only available with drive unit and extra charge	10470				

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